

Habin LEE, *et al.*
Serial No. 10/594,424
March 6, 2009

AMENDMENTS TO THE SPECIFICATION:

Page 1, insert the following heading and sub-heading immediately preceding the paragraph commencing “The present invention relates to multi-agent...”:

BACKGROUND

1. Technical Field

Page 1, insert the following sub-heading immediately preceding the paragraph commencing “It has been suggested that for...”:

2. Related Art

Page 4, insert the following heading immediately preceding the 1st full paragraph:

BRIEF SUMMARY

Page 7, insert the following heading immediately preceding the 3rd full paragraph:

BRIEF DESCRIPTION OF THE DRAWINGS

Page 7, 4th full paragraph:

Figures 1(a)-(d) show [[shows]], in graphical form, elements in a task-oriented conversation modeling technique used in preferred embodiments of the present invention;

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Page 8, insert the following heading immediately preceding “Conversation modeling technique”:

DETAILED DESCRIPTION OF EXEMPLARY EMBODIMENTS

Page 13, final paragraph:

A preferred architecture for a software agent will now be described with reference to Figure 5 according to a preferred embodiment of the present invention. As those in the art will appreciate, the software agent is embodied in at least one computer-programmed processor having the usual CPU in communication with input/output ports, program and data storage memory. A software agent having the preferred architecture is arranged to interpret and to execute one or more roles defined within a received CM in order to implement a corresponding conversation policy.

Page 17, 2nd paragraph:

If at STEP 710 ontology items are identified, then at STEP 720 the model manager 505 retrieves one ontology item at a time from the list created at STEP 705, and determines firstly whether, at STEP 725, a value for the retrieved item is stored in the fact base 525. If it is, then processing returns to STEP 710 to check whether all items in the created list of ontology items have been checked. If, at STEP 725, a value for the retrieved ontology item is not in the fact base 525, then at STEP 730 the model manager 505 checks each of the behaviours in the behaviour library 545 in order to find one that can provide a value for or process the retrieved ontology item. If, at STEP 735, a suitable behaviour is found, then processing returns to STEP 710 to check whether all items in the created list of ontology items have been checked. Otherwise, at STEP 740, the model manager 505 generates a signal to indicate that the agent 500 is not capable of executing

the CM, and the process of determination ends. If at STEP [[810]] 710 all ontology items in a created list have been checked with positive results, then at STEP 715 the model manager 505 generates a signal to indicate that the agent 500 is capable of executing the conversation model, and the process of determination under STEP 635 ends.

Page 18, 2nd full paragraph:

If, at STEP 825, the retrieved behaviour does require input of one or more further ontology items, then at STEP 830 a check is made as to whether values for each of the one or more further ontology items are available from the fact base 525. If all further ontology items are available from the fact base 525, then at STEP 835 the retrieved behaviour is returned, or at least a reference to it is returned, as the behaviour identified at STEP 730, and the process ends. However, if at STEP 830 any of the required input ontology items are not available from the fact base 525, then the model manager 505 may be arranged to attempt to identify one or more further behaviours (sub-behaviours) from the behaviour library 545 that would be able to provide each required input ontology item found not to be available from the fact base 525. Preferably, the model manager 505 achieves this at STEP 840 by triggering a new sub-process employing the same process steps 805 to 835 of Figure 8 for each required input ontology item and, if necessary, applying this sub-process recursively to a predetermined maximum recursive depth. For example, if a first pass through steps 805 to 835 does not yield a capable behaviour, then the model manager 505 is arranged to make a second pass through steps 805 to 835 in respect of each of one or more required input items found not to be available from the fact base 525. If this second pass finds capable sub-behaviours for all those input ontology items requiring them, then at STEP 835 a top-level behaviour and one or more

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sub-behaviours will be returned in respect of the given ontology item and hence identified under STEP 730, otherwise at STEP 815 the model manager 505 generates a signal to indicate that no suitable behaviours can be found, and the process under STEP 730 ends.

**Page 21, top of page: delete “CLAIMS” and insert the following heading:
WHAT IS CLAIMED IS:**